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#### Our Ref: 136-29

#### XP-002133479

AN - 1999-218980 [19]

AP - JP19970208864 19970804

**CPY - SUMO** 

DC - A89 E13 G06 L03 P84 U11

FS - CPI;GMPI;EPI

IC - G03F7/004 ; G03F7/039 ; H01L21/027

MC - A04-C A08-M08 A12-E07C A12-L02B2 E07-D05 G06-D01 G06-D03 G06-F03C G06-F03D L04-C06B

- U11-A06A U11-C04E U11-C04F U11-C04H

M3 - [01] F011 F012 F014 F016 F017 F019 F433 F499 H102 H122 H181 H182 H201 H202 H211 H212 J011 J012 J371 J372 M210 M211 M212 M213 M214 M215 M216 M220 M221 M222 M223 M224 M225 M226 M231 M232 M233 M240 M262 M273 M281 M282 M283 M312 M313 M315 M320 M321 M331 M332 M342 M383 M391 M413 M510 M521 M522 M530 M540 M781 M903 M904 Q130 Q332 Q454 R043; 9919-DQL01-K 9919-DQL01-U

PA - (SUMO ) SUMITOMO CHEM CO LTD

PN - JP11052575 A 19990226 DW199919 G03F7/039 008pp

PR - JP19970208864 19970804

XA - C1999-064486

XIC - G03F-007/004; G03F-007/039; H01L-021/027

XP - N1999-161818

AB - J11052575 A chemically amplified positive photoresist composition comprises: (A) a resin which becomes increasingly alkali-soluble when treated with acid; (B) an acid generator; and (C) a piperidine-based hindered amine compound.

- The hindered amine light stabiliser (C) preferably contains a moiety of formula (I).
- R = H, optionally substituted alkyl or alkanoyl. The resin (A) may be a polyvinylphenol type resin in which the phenolic hydroxy groups are protected with acid-cleaving groups, or a resin containing at least one alicyclic ring and acid-cleaving group. The composition preferably contains 80-99.9 wt. % (A), 0.1-20 wt. % (B) and 0.0001-10 wt. % (C).
- USE The photoresist composition is useful for the lithographic production of semiconductor integrated circuits.
- ADVANTAGE The photoresist composition can be activated with high-energy radiation, e.g. far ultraviolet rays, electron rays or X-rays.
- (Dwg.0/0)

AW - LITHOGRAPHY SEMICONDUCTOR INTEGRATED CIRCUIT

**AKW - LITHOGRAPHY SEMICONDUCTOR INTEGRATED CIRCUIT** 

CN - 9919-DQL01-K 9919-DQL01-U

IW - CHEMICAL AMPLIFY POSITIVE PHOTORESIST COMPOSITION COMPRISE RESIN ALKALI SOLUBLE ACID TREAT ACID GENERATOR PIPERIDINE BASED HINDERED AMINE COMPOUND

IKW - CHEMICAL AMPLIFY POSITIVE PHOTORESIST COMPOSITION COMPRISE RESIN ALKALI SOLUBLE ACID TREAT ACID GENERATOR PIPERIDINE BASED HINDERED AMINE COMPOUND

NC - 001

OPD - 1997-08-04

ORD - 1999-02-26

PAW - (SUMO ) SUMITOMO CHEM CO LTD

- TI Chemically amplified positive photoresist composition comprises a resin which becomes alkali-soluble upon acid treatment, an acid generator and piperidine-based hindered amine compound
- A01 [001] 018; G0179 G0102 G0022 D01 D12 D10 D19 D18 D31 D51 D53 D58 D76 D88 F31 F30 D13-R; H0000; H0011-R; M9999 M2095-R; L9999 L2391; L9999 L2095-R; P1741;
  - [002] 018; ND01; K9790-R; K9814 K9803 K9790; K9825 K9803 K9790; K9869 K9847 K9790; Q9999 Q8684 Q8673 Q8606; Q9999 Q7454 Q7330; Q9999 Q7476 Q7330; B9999 B5652 B3521 B3510 B3372;
  - -[003] 018; D01 D11 D10 D23 D22 D31 D76 D41 F08 F07; A999 A771; A999 A204;